

# THE ECOLOGY OF THE MIND

by Luciano Mazzetti

*Dr. Mazzetti's almost lyrical description of the role of encounters, both human and natural, suggests the terrible difficulty that would occur if the diversity of the natural environment, which is so essential to Montessori's prepared environment was lost. In principle, Dr. Mazzetti suggests that the child's encounter with the world needs deep exposure to a healthy natural world, spontaneous and purposeful, in order to make a contribution to saving the planet.*

The title of this lecture, "The Ecology of the Mind," comes from a book by the same title, written by the American author Bateson who confronts the problems of the 21<sup>st</sup> century with this outlook. The problems of the next century will not only be problems of ecology, i.e., the relationship between man and the environment, but they will also be problems of the ecology of the mind. Everything that humanity is now experiencing can have ramifications on the minds of men and create for humanity many risks and many dangers. These sorts of risks can be much more dangerous than an ecological disaster. I will try to give you several concrete examples of this, starting with a thought from Maria Montessori.

She wrote that the universities of war are busy doing their work, while universities of peace don't even exist. The universities of war have been very busy in recent years. Research from their laboratories of death permit us to say that we live in atomic terror, that each of us is sitting on a nuclear warhead. The manipulation of genes in laboratories, research in cybernetics, telecommunications, and computer science are reacting on our minds and on our bodies. There is medical research being done that foresees, in a not too distant future, a fixation of the optic nerve as a consequence of television exposure over many generations. Culture has always had effects on biology. The invention of the fork has modified man's dental physiology. In the past, teeth were strong instruments meant for ripping and cutting. This little technological discovery, the fork, was enough to modify a physiological condition.

Contemporary science has surrounded us with an environment that can have damaging effects

on the equilibrium of the human mind. Blind faith in science also risks suffocating man and human language in a dimension of objectivity. It's almost as if computer language—formal, exact, precise—could replace the ambiguity and the fragility of the human word, the subjective word. If science has produced and is still producing all of this, the resulting imbalances in human life and especially in education appear evident.

In the last three years, three research reports have come out, each dealing with the conditions of children in our world. I will quote only their titles: *Children Without Childhood*, *The Disappearance of Childhood*, *Children in Danger*. From this research it is very evident that latch-key children, without mother, father, or environment, carry with them wounds and scars that are often indelible.

Perhaps these are the problems the twenty-first century offers us. Science can't solve them all. An Austrian philosopher of science, Wittenstein, wrote that even when science will have resolved all its problems, every man will wake in the morning with his own problems on his back. This means that problems are not only those of science, that man's most important truths are not those demonstrated by exact sciences. They are those precarious truths that each of us faces daily with our own courage and our own fears. Albert Camus wrote, "We have scraped the sky with great aerial furrows. We have built farms in the depths of the ocean and we are building the future in the deafening din of factories. All of this and we are discovering that perhaps it wasn't worth a friend's hug, a rose's perfume, warm pebbles in a stream."

Confronted by these problems, I have asked myself if, in Maria Montessori's pedagogic message, there might be some possible answers and therefore even a hint of necessary hope. I believe I have gathered or discovered them around two basic concepts in Maria Montessori's thought: the idea of man and the idea of liberty.

When Maria Montessori speaks of man, she often uses a capital "M." What does this capital letter represent? What does it mean to write a book and entitle it *The Formation of Man*? What does it mean to define education as a help to life? What does it mean to "educate the human potential?" What's behind the metaphor of the child as constructor of man? What's behind the metaphor of the child who works, the child laborer, the builder of man? What's behind the metaphor of the child as "intellect of love," an expression Montessori borrows from Dante? It's evident through these metaphors that Maria Montessori sees the humanization of man as the goal of her pedagogic plan.

To humanize man, to construct a new man, these are the moral principles that inspire all of Maria Montessori's thought. But what does it mean to humanize man, to make man more human? It's almost a prayer: Make us human beings. This construction of man, this creation of man, doesn't occur once and for all but rather each of us accomplishes it daily, each child constructs it daily.

In re-reading Montessori, it's evident that this process of humanization is realized through encounters. John Dewey said that the life of every man is like the course of a long river. The curves of this river are built by the encounters each of us has with others. A child encounters a mother and from this meeting, the course of the child's life is changed. A child encounters an environment, and her life can change because of it. Each of us, then, is the product of a series of more or less fortunate encounters. The encounters that have formed us have been with people, with objects, with reality, with the cosmos. Let's examine them one by one.

First, encounters with people. Psychoanalysts say that it is possible to construct the ego, the *I*, only through the encounter with another, the *you*. The construction of the ego is possible only if each of us can see himself in the face of another. In fact, the words "I" and "you" have no gender. Gender

appears only with a third person. The *I* and *you* transcend every possible encounter and it's only from the *I-you* encounter that we humanize ourselves.

What are the characteristics of the encounter with another? In the first place, each of us needs to meet a master. I mean master in the Greek sense of the word, in the sense of Socrates and Plato, the master or *majenta* who recognizes that in every child and perhaps in every man there is a profound treasure, a hidden energy that the master must succeed in bringing forth. Once when the sculptor Michelangelo was in the Apennine Alps getting marble, a quarry worker asked him how he had made the David. Michelangelo answered, "It was all contained in a block of marble. All I did was bring it out." Michelangelo, an example of master as *majenta*, the one who brings forth.

Let's look for a moment at Montessori teachers. What does the delicacy of intervention mean? What does non-intervention mean? What does this capacity to attract or seduce mean? What does it mean to be present and absent at the same time? What does it mean to be ready for the child's request, "Help me to do it myself"? What does it mean to observe a child, if not listen to her most profound questions? So a Montessori directress has inside herself all the characteristics needed to encounter the other and assist the child in her humanization.

Next, there are encounters with objects. In the beginning, these encounters are casual. Yet we now know how important these encounters are. A child encounters a mother, a room, colors, sounds. The environment is hardly ever organized; nevertheless, the child's mind completely absorbs it. And this environment, full of details and particularities, many times escapes our adult mind.

Rita Montalgini, an Italian scientist who recently received a Nobel Prize, believes that neurons in the brain actually seize and envelop experiences from an environment. Therefore, contained in our neurons are its colors, the sounds, and finest details. This relationship with objects is therefore of utmost importance: the sounds that a child hears, the noises, the colors, the details.

To you who come from a Montessori perspective, what can I add to the importance of the environment? Each of you well knows what it means to organize



Courtesy of Montessori High School at University Circle, Cleveland, Ohio

and care for an environment. You know what it means to watch for the smallest detail, to transform an environment into a fragment of the cosmos that can help a child construct herself into an adult.

Then there's the encounter with reality. All of Freud's thought revolves around the principle of conflict between the world of our desires and the world of reality. Each of us forms a conscious ego in the relationship and conflict between the world of desire and reality (which doesn't bend to desires).

Almost all the psychiatric disturbances of our times are products of a terrible relationship with reality. Hallucinations (Maria Montessori wrote a thesis on hallucinations) are nothing but a falsification of reality. A paranoid is someone who escapes from reality. A neurotic is someone who makes rigid the framework of reality. Briefly, our mental equilibrium depends on the rapport we have with reality. The precarious, unsure balance is the basis of one of the most beautiful works of Spanish literature, *Don Quixote*. Don Quixote without Sancho Panza

would have been only a poor idiot. This means that reality and our relationship with reality are fundamental for every human being. An infant just a few months old will cry if her bottle isn't brought immediately. A baby just a bit older will cry if she can't get candy because the store is closed.

To educate a child means also that the child won't cry just because the store is closed. If education means educating to reality, what is normalization? Wouldn't it be just another name for educating to reality? What are escapes, deviations, barriers, if not efforts to flee from reality? When we set limits in an environment, we build a place that can educate a child to reality. This education to reality, which follows the encounters with people and with objects, leads us to the last encounter with the cosmos.

Let us go on to the encounter with everything that the human being experiences, the cosmos. The cosmos means order. It means gathering the hidden relationships between things. It means being conscious that "at this moment, my words may



disturb the stars,” as a Spanish poet once said. It means being conscious that in the cosmos, we are a tiny fragment but a vital fragment. We are as a drop of ocean water, as important as the whole ocean because it is an integral part of it.

In short, humanizing man, helping him become more human, is possible only if we are very conscious of these different encounters—with people, with objects, with reality, with the cosmos. But humanizing man so he can respond to the problems of the twenty-first century, a decisive and important challenge, is possible only in presupposing a process of liberation. Liberation is another word for humanization.

When speaking of freedom, many things might be understood. I believe that when Maria Montessori spoke of education for autonomy and for freedom, she meant two things. In the first place, a transparent or easy freedom, one that can be given or taken away, doesn't exist. It's as if the freedom Maria Montessori meant were a weighty freedom. On each of us and on each child is a sort of lid or cover. We can only live in freedom when we slowly lift up the heavy edges of this cover. This means that perhaps we are not born free. Perhaps we have no freedom of choice because so often we are obliged to choose and obliged to be free.

The real process of liberation can be identified in distinguishing between the following two concepts. For many centuries, we have striven to liberate

ourselves *from*—from many economic chains, from thousands of types of slavery. In confronting the 21<sup>st</sup> century, it's important to liberate ourselves *for*—for carrying out a plan or a mission.

Perhaps in the twenty-first century, the mission for which we liberate ourselves is a cosmic mission. For every educational deed, there is a dream or hope that animates it. It's impossible to educate without a goal or without a hope. An Italian has written that “to educate is to dream.” Even today as we confront the twenty-first century, we need a dream, but a concrete dream. We need to take this difficult risk.

Maria Montessori offers this concrete dream and the reason for this risk. Humanize man, construct man, bring out the man hidden inside. A free and human man can build a new world and a new society. Freedom is a long process of liberation which has spanned human history and which, in the twenty-first century, runs some great risks. Technology is the ruler today, a less visible prince but perhaps more dangerous than the ruling princes and kings of the past. Each of us here must achieve Maria Montessori's *freedom for* so that we may all succeed in being human and conscientious. One day, we will find ourselves face to face with a child, an adolescent, or simply with another person with whom we share life, and we must be *free for* them. As an English poet said when speaking of his own children, “Let them fly free in the sky like birds and be for them that piece of beach where they will go to rest when tired.”

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